

## **USTRANSCOM and DLA**





### Integrated Data Environment/Global Transportation Network Convergence (IGC) FAD Kickoff 18 September 2008 0800 - 1200







| Star<br>t | End  | Subject                    | Remarks            |
|-----------|------|----------------------------|--------------------|
| 080<br>0  | 0820 | Introductions and Overview | IGC PM             |
| 082       | 0840 | Contracting Team           | IGC Contracting    |
| 084       | 0040 |                            |                    |
| 090       | 0900 | Systems Engineering        | IGC Chief Engineer |
| 0         | 1000 | ESP Considerations         |                    |
| 0         | 1015 | Break                      | and a second       |
| 5         | 1035 | BAH Presentation           | ВАН                |
| 103<br>5  | 1055 | EDS Presentation           | EDS                |
| 105<br>5  | 1115 | FSG Presentation           | FSG                |
| 111<br>5  | 1135 | GD Presentation            | GD                 |









### Introduction and Overview 0800 - 0820





#### IDE/GTN Convergence (IGC) Vision



Vision: Provide common integrated data and application services enabling cohesive distribution solutions for the DoD

#### Enables:

- Common logistics picture
- Distribution visibility
- Material asset & in-transit visibility

#### **Benefits**:

- Enhanced delivery of forces & sustainment
- Improved situational understanding
- Near real-time Enterprise Access to logistics and transportation data
- Improved trust and confidence





#### At The Highest Level





- Core Constraint: GTN cannot provide access to "detail" data
- Core Constraint: GTN does not have an Enterprise Data Warehouse

• Core Constraint: GTN enhancements/upgrades must be backwards compatible



#### Key: Data Strategy









• **Retire the existing GTN operational data store** via separation of data from application and convergence with the IDE without disruption to the mission critical systems that currently rely upon GTN for data.

• Migrate existing GTN and new J-FRB approved front-end user capabilities into a Single

**Sign-On environment utilizing the GCSS-J** high and low-side portals for user access. • **Provide the DoD access to integrated data** 

**required for decision support from DLA and USTRANSCOM systems from a single place.** Initial scope is the data from systems required to retire the legacy GTN data store.

• **Provide timely access to historical data** by creating an automated infrastructure to capture and broker up to five years of historical information

• Improve data quality by providing quantitative measurement reports of data quality to authorized users. Provide a mechanism for functional users to directly compare quality of data in the IGC environment to source systems.

• **Provide organized and understandable meta-data that allows authorized users to determine the genealogy** of information they see in the IGC.







• IGC allows GTN's Enterprise Data Warehousing capability and the capability deliveries of the IDE to be managed by a single Program Manager. Funding from one command does NOT augment the funding of the other command's program; efficiencies are a result of utilizing services rather than "building our own."

 IGC is a change in the way that DLA and USTRANSCOM manage, contract for, sustain, and implement improvements to GTN and IDE infrastructure. The legacy components of GTN will be retired, while the newer ones (e.g., its new Enterprise) Data Warehouse) will be used in conjunction with services provided by the IDE to replace the existing capabilities of GTN, as well as, create new ones.



Meta Data





#### Business Goals:

- Enable more programs to develop new and more accurate capabilities earlier (empower many programs faster)
- Enhance capability to interoperate earlier
- Expose our data as standard services earlier
- Unify IT development across the Domain earlier
- Redirect investment into objective systems earlier
- Achieve tangible ROI earlier
- Shut off GTN and other Operational Data Stores (duplicative) earlier
- Provide infrastructure and services for other programs to utilize

#### Priority For Migration Of Other Operation al Data Stores (Systems) Into Our Environment:

- Security
- Duplicative
- Non-standard approach
- Net-centric; GIG Compliance (cross domain apps must "live" in a DISA DECC)
- End-of life





• The IGC implementation plan has been refined into an overarching program schedule which sunsets legacy GTN components in FY10. The plan is synchronized with guidance from the USTRANSCOM Distribution Portfolio Manager (DPfM), DLA PEO, and USTRANSCOM DPEO and is comprised of multiple spirals to leverage planned IDE enhancements, synchronize with several other USTRANSCOM / Distribution Process Owner (DPO) / Joint development initiatives, and inject investment into the converged environment rather than the old GTN infrastructure.

| Table  | FY06                    | FY07                    | FY08                    | FY09  | FY10                         | FY11         | FY12         |
|--|-------------------------|-------------------------|-------------------------|---|------------------------------|--------------|--------------|
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| Milestone Decisions  |                         | 4.                      | Contract Decision       | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2 | GTN Sun                      | set          | 57.0         |
| Program Products   | EOA/CONOPS              | EA/ACQ STRAT            | ERAM Streamlined        | Products  | •                            |              | EST          |
| <ul> <li>High-side Infrastructure</li> <li>GTN Integration</li> <li>Migrate GTN front-end</li> <li>COOPS</li> <li>GES</li> <li>GTN Sunset</li> </ul> | Tasl                    | k Area I                | ۵ ۱۲                    | Spiral 1 Rel<br>Spiral<br>Spiral 3a 6   | 2a & 2b Rel<br>x 3b Rel      | ask Are      | a III & I    |
| Other releases   | •                       | Other IDE Releases (    | See IDE Schedule)       | Other Releases U  | tilizing IGC Services        |              | Same         |
| Sustainment  | GTN FOC GTN SU<br>May03 | istainment<br>stainment |                         | IGC Sustainment   |                              |              |              |
| Environment Build  |                         |                         | DEV & Test 🔶            | ♦ Pre-Prod to I ♦ L.S. Prod   | H.S. 🔶 H.S COOP<br>Expansion | GES          |              |





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• Applies to "front-end" application development work beyond the scope of requirements documents (CPD/CDD).











### **BICOE Organization**





- Liaison from inception through fielding
- •IV&V



09/03/16





- Client fills out Requirement Summary Form (RSF) and submits form to BICOE
- Coordinate development of User Requirements Document (URD) with BICOE functional lead
- Develop MOA between customer's organization and IGC PM
- Provide funding for development of requirement
- Receive status reports on development effort





- New requirements for Task Area III & IV can be accepted as early as 1 Oct 2008
- BUT ... due to the knowledge transfer & training (KT&T) period associated with the new contract, our ability to take in these new requirements will be somewhat limited until 1 DEC 2008

|  | FY06                                       | FY07                    | FY08                    | FY09   | FY10                          | FY11         | FY12                    |
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| Milestone Decisions  |  | 4.                      | Contract Decision       | 5<br>5<br>5<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |                               | set          | SA MOBIL                |
| Program Products   | EOA/CONOPS                                 | EA/ACQ STRAT            | ERAM Streamlined        | Products   | •                             |              | 5                       |
| <ul> <li>High-side Infrastructure</li> <li>GTN Integration</li> <li>Migrate GTN front-end</li> <li>COOPS</li> <li>GES</li> <li>GTN Sunset</li> </ul> |  |                         |                         | Spiral 1 Rel<br>Spiral<br>Spiral 3a 6  | 2a & 2b<br>Rel                | ask Are      | ea III & I              |
| Other releases   | •  | Other IDE Releases (\$  | See IDE Schedule)       | Other Releases U   | tilizing IGC Services         |              | ALL ST                  |
| Sustainment  | GTN FOC GTN SU<br>May03<br>IDE IOC IDE Sus | istainment<br>stainment |                         | ICC Sustainment  |                               |              | 181                     |
| Environment Build  |  |                         | DEV & Test 🔶            | ♦ Pre-Prod to I ♦ L.S. Prod  | H.S. 🔶 H.S COOP,<br>Expansion | GES          | DP                      |

#### Limited ability to take in new work during KT&T period





- Leverages existing investment; integrate the components from individual programs of record into a comprehensive capability
- Incremental, evolutionary (no big-bang)
- Formalizes a relationship (DLA & USTRANSCOM) that is a "natural act" (supply
- + transportation = distribution)
- Mitigates adverse effects of fragmented and missing data
- Open architecture of modular, interoperable, components
- Reusable services (eliminates redundant interfaces)
- Net-centric
- Best of breed approach (but, very organized ... not a bunch of puzzle pieces scattered about)
- Creates a data integration competency center (we implement our models and prove they work ... not just building theoretical ones)
- Accommodates changing technology (COTS) and requirements





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# Backup





| NewOrder | SYSTEM      | HIGH/LOW | FY         | Sniral |  |  |
|----------|-------------|----------|------------|--------|--|--|
| 1        | TRDM-LO     | Low      | Done       | P 3I 1 |  |  |
| 2        | GFM         | Low      | Done       | P 3I 1 |  |  |
| 3        | CEDI Part 1 | Low      | Done       | P 3I 1 |  |  |
| 4        | GATES       | Low      | April 2008 | P 3I 2 |  |  |
| 5        | GDSS-LO     | Low      | April 2008 | P 3I 2 |  |  |
| 6        | WPS         | Low      | April 2008 | P 3I 2 |  |  |
| 7        | DAAS Part 1 | Low      | April 2008 | P 3I 2 |  |  |
| 8        | RF-ITV      | Low      | April 2008 | P 3I 2 |  |  |
| 9        | CMOS        | Low      | Oct 2008   | P 3I 3 |  |  |
| 10       | AMS-TAC     | Low      | Oct 2008   | P 3I 3 |  |  |
| 11       | COMPA SS    | Low      | Oct 2008   | P 3I 3 |  |  |
| 12       | CEDI Part 2 | Low      | Oct 2008   | P 3I 3 |  |  |
| 10       | IBS         | Low      | Oct 2008   | P 3I 3 |  |  |
| 13       | CSS         | Low      | Oct 2008   | P 3I 3 |  |  |
| 14       | DAASPart 2  | Low      | Oct 2008   | P 3I 3 |  |  |
| 15       | MTMS        | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 16       | DTTS        | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 17       | MDSS II     | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 18       | TCAIMSII    | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 19       | IALIS       | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 20       | NTS         | Low      | 3rd OTR 09 | IGC 1  |  |  |
| 21       | TRDM-HI     | High     | 4th QTR 09 | IGC 2  |  |  |
| 22       | GDSS-HI     | Hiah     | 4th OTR 09 | IGC 2  |  |  |
| 23       | IOPES       | Hiah     | 4th OTR 09 | IGC 2  |  |  |
| 24       | IC3         | Hiah     | 4th OTR 09 | IGC 2  |  |  |





- Data Services Available
  - GFM
  - TRDM
  - CEDI

- Capability Delivered
  - Motor Carrier
     Compliance (MCC)
- Customer
  - USA (SDDC)





🔒 🥝 Internet



#### **Capabilities**

- Allows users of the system to determine exactly which contracted commercial truck carriers are complying with requirements to submit electronic status of movement and Government bills of lading IAW the TTC.
- SDDC now has tools to validate and take action to improve compliance; which should lead to improved intransit visibility.

#### Establishes and validates low-side architecture and concept:

- Reporting & dashboards ... drillable access
- COTS tools
- Role based permissions (granular security by user)
- Metadata to capture business rules and genealogy of what you are looking at

🙆 Done

- Data quality (which we hope will lead to improved visibility)
- Pub/Sub access to data
- Adhoc query

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- Data Services Available
  - GATES
  - GDSS
  - WPS
  - DAAS
  - RF-ITV
- Customer
  - USAF (AMC)

- Capability Delivered
  - World Wide Express / International Heavyweight Express (WWX/IHX)



#### P3I WWX





#### **Capabilities**

•An interactive dashboard with associated drills on a rolling 30 day window.

•A reporting capability on the entire data set of WWX contract information.

•Ability to perform Ad-hoc queries on both the dashboard and reports universes

#### Establishes and validates low-side architecture and concept:

- •Reporting & dashboards ... drillable access
- •COTS tools
- •Role based permissions (granular security by user)
- •Metadata to capture business rules and genealogy of what you are looking at
- •Data quality (which we hope will lead to improved visibility)
- Pub/Sub access to data
- Ad-hoc query

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Total

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- Data Services Available
  - CMOS
  - AMS-TAC
  - COMPASS
  - CEDI
  - IBS
  - CSS
  - DAAS
- New Enterprise Service
  - Cognos

- Capability Delivered
  - Business Decision
     Support System (BDSS)
- Customer
  - J5 / J8









### IGC Contracting Brief 0820 - 0840







- BPA is an agreement between the Government and vendor that specifies terms and conditions without creating an actual award
- Pricing to be in accordance with GSA schedules + negotiated discount + fixed price incentive
- Capabilities Production Specification (CPSs) will be performance-based
- BPAs were awarded to 4 firms
- Issuance of a BPA does NOT guarantee receipt of a task order
- Estimate of 10 tasks per year
- Competitive process to award task orders
- Logical follow on task/s may be non-competitive





□Task Area IV Applies to "front-end" application development work greater than \$250K beyond the scope of requirements documents (CPD).

#### FADS compete when front-end development work associated with a new task:

- has government cost estimate greater than \$250K
- has a government cost estimate less than \$250K, but the ESP proposes price that significantly exceeds government estimate
- has a government cost estimate less than \$250K, but ESP cannot accommodate government schedule or it is in the government's best interest to compete

BICOE – Business Information Center Of Excellence ESP – Enterprise Service Provider FAD – Front-End Application Developer







 Evaluations will be in accordance with FAR Part 8
 Technical Merit will be more important than price, best value determination, may include a trade off process.
 Adjectival Rating scale

27





### Technical Approach

- Development Strategy-offerors' plan for performing the development activities required to meet the Capabilities Production Specification (CPS) is integrated, meaningful with the least risks
- Development Schedule-offerors' timeframe for performing the development strategy for the CPS is logical and well-defined
- Resources Allocation- strategy for expertise, experience and number of resources proposed to support the development of activities required are adequate to meet the CPS



Exceptional
Highly Acceptable
Acceptable
Marginally Acceptable
Not Acceptable







- Vendors price must be in accordance with the previously discounted FSS pricing however, vendors can offer greater discounts than offered in their proposals.
- All price components are to be consistent with vendors' negotiated proposals
- Vendors assumptions analyzed to determine impacts on total cost of ownership.





- Purpose: Government will monitor contractor performance re: contract requirements and deliverables.
- Each task order will have its own plan.
- Contract Management Plan is an internal government process.
- Past performance as assessed will be part of the evaluation process for the award of future task orders



# **IGC Systems Engineering**





### IGC Systems Engineering Brief 0840 - 0900

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- Agility: Program capable of meeting War-Fighter requirements on-demand
- Flexibility: Program capable of leveraging best of breed solutions and emerging technology to satisfy multiple engagements (Enterprise Reuse)
- Scalability: Technical ability to support an increased operational tempo and an ever growing stream of data/information



### Systems Engineering Process



- Goals
  - Clear understanding of what is required
  - Milestones, Reviews and CDRLs commensurate with applied engineering principles
  - Increased Partnership and Collaboration
  - Clear cut path to a successful Spiral and Program



### How We Need It To Work







### System Engineering Process






### **Requirements Phase**



- Goal
  - Understand and define detailed requirements for delivery
- Inputs
  - Government provided Capability Production Specification (CPS)
- Outputs
  - System Requirements Specification (SRS)
  - Requirements Traceability Matrix
- Milestone
  - System Requirements Review





## **Functional Phase**









### **Build Phase**









### **Implementation Phase**



- Goal
  - Ensure the functionality is delivered and the software successfully operates from end-to-end in the production environment.
- Inputs
  - Successful ORR
  - Deployment Artifacts /Plan
  - Training Artifacts /Plan
- Outputs
  - Deployment
  - Training
- Milestone
  - Production Release





#### Agile Delivery & Developer's Guides



- Following the IGC Vision the ESP will be responsible for delivering, updating, and maintaining Developer's Guides
  - Dev Guides are used primarily by FAD and other government resources looking to leverage IGC enterprise services
  - The Dev Guides identifies dependencies between ESP / FAD, Milestones / Schedule relationships, and the technical solutions (standards) for FADs to develop with



### **ESP** Considerations





#### Lockheed-Martin

0900 - 1000



#### LOCKHEED MARTIN

We never forget who we're working for ®

CONVRIG

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1437 143 AW

Front End Application Developer Kickoff Meeting: 18 September 2008





Welcome & Introduction Technical Overview Management Overview







### **Introduction & Overview**

IGC Program Manager



#### **IGC Schedule**







### **Team LM's Vision for IGC**





Delivers Critical End to End Information to the FADs, 3<sup>rd</sup> Party Developers, Supply Chain Operators and the Warfighter





### **Technical Overview**

**Engineering Lead** 



#### Technical Approach Overview



FADs & 3rd Parties





#### Technical Approach Overview







Collaboration and Responsibilities









### IGC Exercise System (IES)





- EDW Partitioning Supports as Many Exercises as Operationally Required
- Use of Unmodified ESB, ETL, ELT, and BI Enable All IGC Applications
- Additional Exercise Capabilities Support Training, Testing, FAD Sandboxes, and Operational Analysis

#### IES Capabilities Exploited to Create FAD Sandboxes



### **New IGC Services**



- myIGC Delivers Unprecedented Data Accessibility through Self Service Capability for Users and Developers
- Enhanced Data Discovery Portal and Google-powered OneBox Search Focus Data Access
- Strong Functional and Data Management Expertise Enables Future Enterprise Data Management Solutions
- No Learning Curve, Natural Process



*myIGC Framework Attracts Users and Developers to IGC by Providing Universal Access to "One Version of the Truth"* 



# EDW Development



- Experienced Team w/ Teradata and BO Partners Supports FAD Development Producing Applications on Flexible Infrastructure
- Experienced in Rapidly Creating IGC Infrastructure Using SE Methodology
- Created Active Enterprise Data Warehouse which Exceeds Performance Requirements



The Right Team To Open Up New Horizons for Supply Chain Management



# **Assured Testing Results**



- Consistent Testing Processes Result in < 1% Priority 1</li>
   Software Problem
   Reports
- Reusable Test
   Cases Foundation
   for Collaboration
- Test Team
   Involvement Early in Development
   Lifecycle Enables
   Early Detection



Reliability and Confidence Built Into the Lifecycle



### ESP & FAD Testing Handoff





Test Methodology Designed for FAD Integration



#### Deployment -Implementation





• Team LM's Operational Experience with **DISA DECC Ensures** Seamless Deployment and Close Collaboration

 Proven Deployment Processes Have Been Updated with Lessons Learned from GTN/P3I

 Each Release is Test Deployed 3x before Deployment Risk 59

A Proven Implementation Plan Based on Successful DECC Deployments





#### **Management & Integration**

#### Management and Integration Lead



#### Detailed Management Process - Planning





- Jump-Starts Execution
- Speeds Process Improvement and Adoption

 Shortens Task Order Creation Time while Ensuring Consistency

Embeds Technical and IGC Partner Integration



## Process - Perform and Monitor





- Integrates Development and Management Activities
- Captures Key Cost and Schedule Performance Metrics
- Facilitates Management of Diverse Community of IGC Partners Enables Effective Performance Monitoring of Unlimited Task Orders



#### Program Management Dashboards





- Provides Single Point of Access for all Critical Program Information
- Ensures Timely Delivery of Current and Accurate Information
- Reduces PM Costs and Workloads

Full Visibility of Program Performance



### **IGC Automated Workflows**



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|--|-----------------|---------|-------------------------------|---|--|--------------------------------|---|--|--|--|--|
| TASKS TO BE COMPLETED                  |                 |         |                               |   |  |                                |   | - A.S.   |  |  |  |
| TASK NAME *                            | ASSIGNEE *      | NOTES * | SCHEDULED<br>START END DATE T | DUE DATE *  | PCT PR - PR<br>COMP - PR - DONE  | , ERB <del>, ERB</del> , STATU | TASK  | Tasks  |  |  |  |
| Decompose Requirements                 | Chris Beckley 🗸 | Add     | 26 May 2008 29 May 2008       | 5/28/2008   | 100% true true   | true true Complet              | Update  | arouned by   |  |  |  |
| Create RE/AC                           | Andrew Aslinger | Add     | 30 May 2008 5 June 2008       | 6/3/2008  | 100% true true   | true true Complet              | Update  |  |  |  |  |
| Create RTM                             | Kriste Loesch   | Add     | 11 June 17 June 2008          | 6/5/2008  | 90% true true  | true true Started              | Update  | lead to be   |  |  |  |
|  | 1100 20001      |         | 2008 17 June 2008             |   | 5010 446 446   |                                |   | accienced  |  |  |  |
|  |                 |         |                               | Get Task Infor  | Get Task Information:<br>Task Name: Create Reference Data Logical Data Model (Level I)<br>Assignee: loeschk1<br>Start Date: 2008-04-01<br>Target End Date: 2008-04-07<br>Percent Complete: 0 |                                |   |  |  |  |  |
|  |                 |         |                               | - Notes/Instruct  | ons from Lead:   | •                              |   |  |  |  |  |
| Task Worksheet sent<br>Developer Inbox |                 |         |                               | Update Task Status: Update Status: Update Status  Reviews Required: Percent Complete: Percent Complete: Percent Complete: Percent Complete: ERB Required: true ERB Required: true ERB Done: false Percent Complete: ERB Percent Complete: Per |  |                                |   |  |  |  |  |



#### FAD Presentations







#### **BAH** 1015 - 1035





#### **Team Overview**

# Front-End Application Development (FAD)

O'Fallon, IL 18 Sept 2008







- Our Team
- Approach and Highlights
- Relevant Experience
- Points of Contact



management and technology consulting firm with proven success in both government and commercial practices



Booz | Allen | Hamilton years delivering results that endure

- Since our foundation in 1914, Booz Allen participated in more than 60,000 projects for over 10,000 clients across 75 countries
- Over the last century, Booz Allen continued to grow and evolve from its initial offerings as a general management consultant to its current position as a leading provider of strategic, operational, and technological services
- Booz Allen has longstanding involvement with programs spanning the entirety of the JDDE. We are committed to bringing our full range of thought leadership, strategic planning and technical expertise to support IGC through FAD activities



Three organizations were added to the team to broaden mission insights and technical sophistication



| Team Member  | Key Capabilities for IGC FAD  |
|--------------|---|
| STANLEY      | •Supporting USTRANSCOM since 1995, providing business<br>process improvement, systems development, and<br>technical support.  |
| Solutions    | •Performance on USTRANSCOM engagements including the<br>Voluntary Intermodal Sealift Agreement (VISA) program;<br>the GTN Data Quality program; functional support to GTN<br>and GTN 21; Science and Technology (S&T) program office<br>support; DPO Business Process Improvement (BPI)<br>program; functional support to the Distribution Portfolio<br>Management (DPfM), and Distribution Transportation<br>Coordinator Initiative (DTCI)   |
| <i>i</i> bea | <ul> <li>Provides architecture and data interoperability<br/>assessments for various programs including JC2, GTN,<br/>JOPES, TMDS, CAMPS, and others for compliance with the<br/>Net-Centric Enterprise Services (NCES) model</li> <li>Recognized experts in Service-Oriented Architecture (SOA),<br/>NCES, and web services development</li> <li>Partner with Booz Allen on Agile development projects at<br/>USTRANSCOM and DFAS</li> </ul> |
|              | • Provides the enterprise application software foundation and best practices for SOA, enterprise integration.   |



operating model emphasizing responsiveness and partnership across the IGC enterprise



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Our FAD solution is centered around four core value propositions:

| Value<br>Proposition                               | How the proposition adds value  |
|--|---|
| Deep Mission<br>and<br>Domain<br>Understandin<br>g | Our operational insights will provide a "force<br>multiplier" when developing mission<br>applications to support the Warfighter                       |
| Agile<br>Development                               | This proven approach will quickly deliver<br>working software, while minimizing risks<br>inherent in the software development process                 |
| Management<br>Integration                          | Our integrated management processes,<br>tailored to an Agile development approach,<br>will ensure on-time, on-budget, and high<br>quality performance |
| Partnership  | We will work as integral partners with IGC  |





- Application Development
- Core Enterprise Services
- Distribution and Logistics Requirements Management
- Service-Oriented Architecture, System / Service Engineering
- Business Intelligence
- Information Assurance, Security Engineering



#### FAD Presentations







#### **EDS** 1035 - 1055




# DLA IGC FAD Kick-Off: Introduction to Team EDS





#### • A Business Ally You Can Trust

- EDS has more than 20 years of expertise in rapid implementation of tailored successful business intelligence solutions.
- Proven development and implementation methodology that significantly reduces risk and enables rapid solution delivery to time, cost & specification creating significant confidence and value for our customers
- Demonstrated ability to work in partnership with customers and Enterprise Service Providers to ensure a successful outcome for the mission

#### Corporate Resources

- EDS has over 1,500 Global BI resources (not including HP or our teaming partners)
- \$3.5B in annual R&D
- Team EDS has direct access to the Business Objects & COGNOS developers, development labs and key resources to ensure delivery of robust solutions and priority issue resolution
- Proven BI Expertise
  - EDS has successfully completed over 2,700 BI engagements over the past 3 years to over 400 clients
  - Deep industry experience includes healthcare, government, manufacturing, financial services, communications, transportation, retail etc.





| EDS Team<br>Member               | Value Add   | Relevant Core<br>Competencies  |  |  |  |  |
|----------------------------------|---|--|--|--|--|--|
| Business Objects                 | Technology Expertise<br>and USTranscom<br>Knowledge | Technology and consulting expertise  |  |  |  |  |
| COGNOS                           | Technology Expertise                                | Technology and consulting expertise  |  |  |  |  |
| GeoDecisions                     | USTranscom knowledge                                | Professional services in support<br>of Geospatial information<br>integration and decision making |  |  |  |  |
| OLGOONIK (Native<br>American 8a) | BI Services Expertise<br>and DLA Knowledge          | Professional services for Business<br>Intelligence requirements                                  |  |  |  |  |
| VICCS (WOSB,<br>HUBZone)         | BI Services Expertise<br>and DLA Knowledge          | Professional services for Business<br>Object requirements.                                       |  |  |  |  |
| MaxiSoft (WOSB)                  | BI Services Expertise                               | Provide Business Objects and COGNOS expertise  |  |  |  |  |

# Questions?

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## FAD Presentations





### **FSG** 1055 - 1115



We can help you decide which way to go!



# The Federated Software Group, Inc.





### **FSG Overview**

### **IGC FAD Proposal Highlights**

### **Major Programs**

Questions





# **FSG Overview**







# About FSG

- Small company formed in 1992
- Located in St Louis area
- 145 Employees
- Low 5% turnover
- Customers
  - Air Mobility Command
  - USTRANSCOM
  - USJFCOM
  - DLA
  - Air Force Reserve Command
  - USPACOM
  - US Navy







#### **Employees' previous experience:**

- Digital Equipment Corporation
- McDonnell-Douglas
- Boeing
- Air Force, Army, Navy, Marines
- Emerson
- Universities/Research Institutes
- Federal Reserve

#### Focus of expertise:

- Average 17.3 years post graduate experience
- Engineers
- Functional experts (flight crew members, logisticians, soldiers, transporters)
- Program/project managers
- Technical writers and trainers
- Ten Usability Analysts on staff, certified by Human Factors

- 3M
- Southwestern Bell Telephone
- Master Card
- NASA
- Arthur Andersen
- Other prime contractors





#### **Education:**

- 45% of employees have Master's Degrees
- Two PhDs on staff









# FSG Strengths

#### **Primary:**

- Software development
- Architecture
- System integration
- Program management

#### Secondary:

- Training
- Software maintenance
- Security testing/evaluation
- System administration
- Database administration
- Requirements analysis
- Penetration testing
- Usability analysis and testing





# **Project Characteristics**

- Flexible but formal development processes
- Latest proven development tools and languages
- Close interaction with the customer
- Joint Application Development/Rapid Application Development (JAD/RAD)
- Spiral development and delivery
- Formal internal testing
- Flexible customer testing
- Usable system documentation
- Task oriented product training
- Solid project management





# IGC FAD Proposal Highlights







- FSG on only the FAD portion of IGC
  - We fit into the FAD area of the IGC community
- Together, the IGC development community and government must quickly identify and publish user-interface style guidelines
- Don't wait until task order to involve FADs ٠
- Recommend FAD's involvement from Day One
  - Enables FAD's to respond more guickly
  - Enables ALL team members to provide input -
  - Leverages FAD's domain knowledge of DLA and USTRANSCOM
  - FADs able to help define, test, and refine the business process and environment used to build test and deploy capability
  - FADs can help identify transformation and business logic requirements







- To be successful for our customers, all IGC partners, ESP and FADs alike, will need to maintain an accurate an up-to-date understanding of the state of the IGC databases, universes, information feeds, information disclosure rules, business rules, and web services
  - Maintain an open exchange of ideas
  - Leverage the knowledge of all
  - All involved in program reviews
  - To maintain situational awareness of:
    - Development status
    - Issues
    - Updates to processes and procedures
    - Desires of the government







- Any unique information processed for one FAD will likely be required of another later, so by enforcing processing in the shared data layer (Teradata warehouse) those algorithms are built once and shared often
  - No proprietary data within IGC
- Recommended common tools and processes used by both ESP and FADs
  - So that processes are transparent within IGC program team members







- Qualities that enable a federation of IT professionals to perform in concert are:
  - Open, professional and timely communications
  - Common standards for requirements, analysis, software, performance, visual interfaces, security and documentation
  - Storage of program artifacts in a central repository
  - Sharing of information -
  - Company-to-company Memoranda of Agreement
  - Corporate Leadership Commitment to the common customer
- A central repository, shedding the "rice bowl" approach to intellectual property





 Our experience in developing front-line applications to manage the USTRANSCOM enterprise brings value to FAD development.
 We know our cutomor's expectations for high-performing tools that visualize accurate matable data

 The phrase "team player" can never be overused, and the IGC must be a team of team players
 The fair and open exchange of ideas within IGC will shephere the program" success
 Full participation of the FADs starting on day one will enable this.







# Major Programs





#### **Global Decision Support System - GDSS "Legacy"**

- GOAL: Integrated Force-level mission management
- AMC's Command and Control System
  - Flight following, mission scheduling, airfield suitability
  - Graphical exception management and briefing capability
  - >4000 world-wide users
- System of systems
- Consists of 1.5M SLOC in 10 separate code lines
- Thick and browser clients; multiple applications (GDSS, M3, RIDL, G2, etc.)
- Extensive data brokering and external interfaces (~40)

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| VMZF003SW197  | 127WG   | 37786      | C130E       | OKBK   | DEP         | 0197/0815      | OKAJ  | OKAS  | OKAJ  |      |    | 3B1   |             |
| RENYIH629202  | 939RQW  | 44855      | HC130P      | SBCG   | DEP         | 0206/1900      | SBCG  | SBCG  | SBCG  |      |    | 541   | -3.0        |
| VMZF004SW207  | 86AW    | 40502      | C130E       | OMAM   | DEP         | 0207/0645      | OBBI  | DOMS  |       |      |    | 3B1   | 0.0         |
| PMZF518NW205  | 62AW    | 40633      | C141B       | CYQX   | DEP         | 0207/1648      | KHST  | KTCM  |       | App  |    | 181   | -19.8       |
| PBB06Q5SZ207  | 62AW    |            | C141B       | KCHS   | DEP         | 0207/2100      | LPLA  | GOOY  | FTTJ  | Reg  |    | 1B3   | 0.0         |
| PAM224501205  | 62AW    |            | C141B       | PHIK   | DEP         | 0208/0800      | KDMA  | KHMN  | KTCM  |      |    | 1A3   | 0.0         |
| PEN030900199  | 60AMW   |            | C005B       | EGXJ   | DEP         | 0208/1000      | EGUN  | KSUU  |       |      |    | 4B2   | -24.0       |
| 8PH235Q11207  | 3194RW  | 38883      | KC135R      | EGUN   | DEP         | 0208/1125      | ALTR  | CYYR  | ALTR  |      |    | 2A3   | -27.0       |
| PMGA65501208  | 62AW    |            | C141B       | KPOB   | DEP         | 0209/0110      | DZ20  | KPOB  | DZ20  |      |    | 3B1   | -24.7       |
| ADN0807UK199  | 437AW   | 60007      | C017A       | EGLF   | DEP         | 0213/1201      | EGUN  | CYQX  | KCHS  |      |    | 4B1   | 0.0         |
| QEN03M005220  | 105AW   |            | C005A       | TJNR   | DEP         | 0221/0833      | KGTF  | KSUU  |       |      |    | 2A1   | -0.1        |
| PAMAAAAAA221  | 305AMW  | 50224      | C141B       | KDOV   | DEP         | 0221/1300      | KPOB  |       |       |      |    | 341   | 0.0         |
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| PBB30K500175  | 62AW    | 67067      | C141B       | KWBI   | DEP         | 0231/0514      | LPLA  | ETAR  | KW/BL |      |    | 1B3   | -0.2        |
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| QUNR0T901329  | 459AW   |            | C141B       | KSTL   | DEP         | 0331/0100      | KBLV  | KSTL  |       |      |    | 541   | 0.0 💌       |

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#### **GDSS Modernized**

GOAL: Next generation AMC C2 system Force/Unit integrated management

- Replacing GDSS (including IMT) and C2IPS with single, integrated system
- Supported P3I proof of concept initiative
- Improved C2 data integrity, security and system availability
- Coalition effort with CSC, SCP, SCT, DO, CSS
- Lead system/software architect and database developer
- Supports SOA via Mobility Enterprise Information Services (MEIS)

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| Aircraft Management                     | PMX                | AC Wind CSrc LEA M  | DS C174 DHD  |  |  | KDOV 3230/1200 KBLV KSUU   |
| Aircraft Summary                        | ▶ PQR              | Squadron CDD Alerted MxS  | Stat FMC   |  | - The Ale and and  | RJTY 90063 3230/2145 WSAP FJDG OBBI App Req  |
| Transportation Plan Summary             | AJW                |   |  | 2 😸 🎿  | AS ADDA  | EDDF 3231/1845 ETAR OTBH ETAR Reg  |
| Crew Scheduling                         | ABA                | Msn # Event Loc Sch Time Sch PC Est Time #  | Act Time Act PC Tail #                                     |  |  | KDOV 3232/1400 ETAR KDOV KNGU  |
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| Ground Event Summary                    |                    | ARR FJDG 3231/1330 D 3231/1330  |  |  |  | 3246/1741  |
| Business Rules                          | [4]                | PQR 05F3 P0 230 DEP FJDG 3232/0945 S 3232/0945  | 90063  |  | The second secon | 2  |
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#### Single Mobility System - SMS

GOAL: Deployment and distribution requirements management and tracking

- Mobility portal supporting multi-modal transportation operations
- Data fusion from multiple air and surface systems
- Web-based applications and visualization
- Metrics and forward-looking alerts
- Supported organizations:

Over 10,000 active users, DDOC, C-DDOC, AMC (TACC, A-3, units), AFRC, ANG, White House Military Office, JTF 6 (counter-drug), unified commanders, service users

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#### SMS - Situational Displays / Knowledge Wall

GOAL: Visualization of decision-ready data

- Provides leadership with dynamic display of up-to-date information
- Web-based integrated "briefing" data
- Eliminates time consuming briefing preparation task
- Fused data from numerous systems







#### **Events Logbook - ELB**

#### GOAL: Dynamic information fusion and web-based collaboration system

- In daily use by numerous organizations to share and track information
  - USTC J6 Programs, DEAMS, DPfM, J3 DDOC, C-DDOC, Deployed DDOCs, SDDC, MSC Ops, AMC CAT, AMC NOS, TACC, JFCOM, JOSAC, GPMRC, WPS/GATES Convergence Team
- Supports many processes: Workflow processes, Lessons Learned, shift logs, reports, message management, Current Intel Report, Hot Issues/Display Management
- First system to "pass" USTRANSCOM's DTS EA Certification process
- Pilot program for upgrade to Microsoft .NET technology at USTRANSCOM



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## Summary

### **FSG Overview**

### **IGC FAD Proposal Highlights**

### **Major Programs**





# Questions



## FAD Presentations





### **General Dynamics** 1115 - 1135







## **GENERAL DYNAMICS** C4 Systems

# IGC/FAD Kick-Off

Sep 18, 2008



# **General Dynamics C4S**







### General Dynamics C4 Systems Resources



#### Approximately 10,200 employees worldwide

•Arizona - HQ •Over 3000 Employees



Massachusetts



•Canada •Over 2100 Employees

- CMMI<sup>®</sup> Level 5 rating for (Systems and Software Engineering and Supplier Sourcing)
- SEI SW-CMM<sup>®</sup> Level 5 rating
- ISO 9001:2000 Certified Quality Management System
- ISO 14001:2004/18001 Certified
- OSHA VPP STAR site (Arizona)
- HCD Human Centered Design

4





- Existing programs and disruptive technologies
- Leverage internal investments
- Innovative teammates with domain expertise
- Proven software processes and methodologies
- SOA Governance and Reference Architecture
- Metadata-based information services
- Abstraction to Open Standards
- SOA Robust prototyping/Validation Environment
- SOA Assessment, Migration and Maturity Models







- Data Integration/In-Transit Visibility:
  - TransViz: Data collaboration and visualization for deliberate planning
  - AFRL JBI: Information Management layer for NCES
  - CPOF: Real time collaboration and visualization for C2
  - GCSS-J: Integration & Synchronization
  - M & S expertise facilitates agile development







- Business Intelligence
  - World-class service based on rigorous training and certifications
  - Follow global standards such as the BI Success Model
  - Uses Business Intelligence Solution Accelerator methodology
  - Integrated service lines consist of:
    - Product
    - Platform
    - Data optimization
    - Decision services

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### Example Application -TransViz



- Transportation planning tool
  - Analyze information
  - Share thoughts
  - COA Analysis
- Supports cross-functional planning and execution
- Users Collaborate in nearreal time to resolve sourcing, validation, and movement issues




# **Example Application- CPOF**

Commanding General



### Command Post of the Future

- Collaborate
  - Across ABCS
- Communicate
- Visualize

## Share real-time information

- Incident reporting
- Trend Analysis



Brigade Commander

G3 Battle Major



## Viz Innovation Center



# Center Of Excellence for information-centric visualization and collaboration solutions



#### Capabilities

- Product: CoMotion Product Line
- **Consulting**: Human Centered Design and Application Development
- Methodology: Double Helix
- Innovation: R&D; Product Concepts to Fielded Systems

### Facilities

- Pittsburgh
  - CoMotion Product Line
  - Birthplace of Command Post of the Future (CPOF)
- Scottsdale: Foundry- replicates VIZ

#### See What You Think™